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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,626	10/22/2003	Genc L. Cangiani	0918.0175C	4036
27896	7590	06/09/2004	EXAMINER	
EDEL, SHAPIRO, FINNAN & LYTLE, LLC 1901 RESEARCH BOULEVARD SUITE 400 ROCKVILLE, MD 20850			PHAN, DAO LINDA	
			ART UNIT	PAPER NUMBER
			3662	

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



## Office Action Summary

Application No.

10/689,626

Applicant(s)

CANGIANI, GENE L.

Examiner

Dao L. Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |



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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Purdy et al (US 2003/0095068).

Purdy et al teach a method of transmitting a plurality of signals from a common antenna including generating (fig. 1) a first signal for transmission via a first transmit beam, generating (fig. 1) a second signal for transmission via a second transmit beam, forming (p. 3, paragraph 0031) a composite signal that includes the first and second signals, wherein the phase of the composite signal accounts for signal modulation and beam forming characteristics of the first and second signals (p. 2, paragraph 0023), supplying (fig. 2) the composite signal to the common antenna, and transmitting (fig. 1) the composite signal from the common antenna.

With regard to claims 14-27, Purdy et al further teach an apparatus for transmitting a plurality of signals including a phased array antenna 16 comprising an array of antenna elements, a transmitter system (fig. 1) that receives a first signal for transmission via a first transmit beam and a second signal for transmission via a second transmit beam, the transmitter system forming a plurality of composite signals and



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supplying the plurality of composite signals to respective antenna elements of the phased array antenna, wherein phases of the composite signals are a function of signal modulations of the first and second signals and phases of the respective antenna elements required to form the first and second transmit beams (p. 2, paragraph 0023), wherein the phased array antenna transmits (fig. 1) the first signal via the first transmit beam and transmits (fig. 1) the second signal via the second transmit beam.

3. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by King (Pat. No. 3,872,477).

King teaches an apparatus and a method of transmitting a plurality of signals from a common antenna including generating (col 9, lines 58- 62) a first signal for transmission via a first transmit beam, generating (col 9, lines 58- 62) a second signal for transmission via a second transmit beam, forming (col 1, lines 42-48)) a composite signal that includes the first and second signals, wherein the phase of the composite signal accounts for signal modulation and beam forming characteristics of the first and second signals (col 1, lines 50+), supplying (col 5, lines 58-67) the composite signal to the common antenna, and transmitting (col 5, lines 58-67; col 9, lines 58-62) the composite signal from the common antenna.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

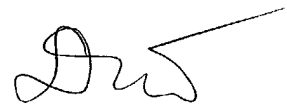
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dao L. Phan whose telephone number is (703)306-4167. The examiner can normally be reached on M-F 9:00-5:30.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarcza Thomas can be reached on (703)306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DAO PHAN  
PATENT EXAMINER